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Etymological Outline

—OF THE—

ELEMENTS OF

PHYSIOLOGY

and

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ANATOMY.

—ARRANGED BY—

Clifton Scott, M. D.

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ANNEX

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ETYMOLOGICAL OUTLINE

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CLIFTON SCOTT, M. D.

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Preface.

—o—

In presenting this outline the author would say that while it has not grown up in the class-room the needs of the class-room have suggested its preparation. Recognizing that students who are far enough advanced to study these subjects with profit, ought to study the *subject* rather than a book, it has been arranged without reference to any text.

The fact that several states have passed laws making these studies part of the common school course, thus compelling thousands of pupils who will never know anything of the dead languages to study Physiology and Anatomy, is sufficient excuse for using the English Spelling of Greek terms.

Having learned that most pupils in the elementary classes of our schools experience great difficulty in tracing out the etymology of scientific terms and in composing brief definitions from the wordy explanations of our authors, some work in both these lines will be found in this outline. For a similar reason the author has introduced only that anatomy which he conceives to be necessary for the comprehension of the subject of physiology.

For the sake of brevity and for the purpose of cultivating memory all repetition of etymologies has been avoided.

As this work is only an outline and in no way a substitute for a text only such topics have been discussed as the pupil cannot readily prepare upon by the study of our ordinary elementary texts, all others are placed in their logical order and left to the pupil to elaborate.

The author wishes to express his thanks for the friendly criticisms of his colleagues, Dr. A. Schneider, and Mrs. A. J Lilly, and for the valuable assistance of his pupils Messrs. J. A. Pellett, and C. E. Kellogg.

If the pupils into whose hands this outline may fall are led by it to a comparison of the views of different authors then the author's purpose will have been realized. CLIFTON SCOTT, M. D.

Explanation of the Method of Outlining.

From Neighbour's Outline of Letter-Writing.

The capability of expressing subdivisions to any degree, as well as the compactness, characteristic of the system of outlining employed, is bringing it rapidly into favor.

It cannot be expected, however, that to every one who shall examine this text the method will be familiar, and for this reason a brief explanation of its workings, at the beginning would appear to be advisable.

In every production in which logical arrangement is aimed at, each thought has its appropriate place, in no other than which would it do so well. This place is indicated in the following outline by a character, THE INDEX, composed of COEFFICIENT and EXPONENT. The coefficient denotes the PLACE of the thought among others of the same rank; the exponent, the DEGREE of subdivision of the main topic. To make the meaning more clear, the student can put a part of the work of the text into braces. Then the exponent 1 indicates the FIRST degree of subdivision, the exponent 2 the SECOND, 3 the THIRD, etc., of the main topic, Physiology.

Both coefficient and exponent are read as if cardinal adjectives. Thus 1^2 is read "one-two," 5^6 is read "five-six."

1[1] PHYSIOLOGY.

1[2] DEFINITION:—The science which treats of the functions of the organs of the organized bodies.

2[2] DIVISIONS.

1[3] HISTOLOGY:—Gr *istos*, a tissue, and *logos*, a discourse.

1[4] DEFINITION:—The science which treats of the minute structure of tissues as revealed by the microscope.

2[4] TISSUE.

1[5] DEFINITION:—The substance composing an organ.

2[5] KINDS.

1[6] EMBRYONIC:—Gr. *em*, within, and *bryo*, I grow.

1[7] DEFINITION:—A tissue composed of primitive cells from which all organized bodies are developed.

2[7] ELEMENTS.

1[8] PROTOPLASM;—Gr. *protos*, first, and *plasso*, I form.

1[9] DEFINITION:—A living, mucilaginous substance.

2[9] CHARACTERISTICS.

1[10] MOVEMENT (Amœboid):—Gr. *ameibo*, I change, and *idos*, like A constant change of form.

2[10] Separates into spheroidal masses.

2[8] Granules.

3[7] Where found.

4[7] CHARACTERISTICS.

1[8] Homogeneous structure.

2[8] Multiplication of cells.

2[6] CELLULAR:—Lat. *cellua*, a little cell.

1[7] DEFINITION:—Tissues in which cells have assumed special characteristics.

2[7] CELLS:—Lat. *cella*, a little sack.

1[8] DEFINITION:—A definite mass of protoplasm.

2[8] Parts.

1[9] NUCLEUS:—Lat. *nux*, a nut. A differentiated mass in the interior of a cell.

2[9] Cell contents.

3[9] Cell wall.

3[8] Growth.

3[5] FORMS:—Lat. *forma*, a form, shape.

1[6] EPITHELIUM:—Gr. *epi*, upon, *thele*, a nipple

1[7] DEFINITION;—Layer of cells covering surfaces exposed to the air.

2[7] Characteristics.

1[8] Hardened matrix.

2[8] Definite form.

3[8] Removal.

4[8] Renewal.

3[7] Kinds.

1[8] SQUAMOUS:—Lat. *squama*, a scale.

1[9] Description.

2[9] Location.

4[7] Mode of growth.

5[7] METAMORPHOSES:—Gr. *meta*, a change, and *morphav*, a form.

1[8] Nails.

1[9] Bed of.

2[9] Base of.

3[9] Growth of

2[8] Hair.

1[9] Location.

2[9] Elements.

1[10] SAC:—Gr. *sakkos*, a bag or pouch.

2[10] PAPILLA:—Lat. *papilla* a nipple. A bulb situated at the bottom of a hair sac.

3[10] SHAFT:—The cylindrical, horny portion of a hair.

1[11] Growth of.

2[11] Parts of.

1[12] MEDULLARY:—Latin, *medius*, middle.

2[12]: CORTICAL:—Lat. *cortex*, bark.

3[12] CUTICLE:—Lat. *cutis*, skin.

4[12] Root sheaths.

5[12] GLANDS:—(sebaceous), Lat. *sebum*, suet.

6[12] MUSCLES:—Gr. *mus*, to move.

3[8] CRYSTALLINE LENS:—Lat. *lens*, a lentil.

2[6] CARTILAGE:—Lat. *Cartilago*, a firm, elastic substance from which bones are developed by ossification.

1[7] Elements.

1[8] Cells.

2[8] Intercellular substance, matter existing between the cells.

2[7] Characteristics.

1[8] Abundance of intercellular substance.

2[8] Of cells.

3[8] Of growth.

4[8] Elasticity.

5[8] Blood supply.

3[7] Composition.

1[8] Protoplasm.

2[8] Oil globules.

3[8] CHONDRIN:—Gr. *Chondros*, cartilage. A jelly-like substance extracted by boiling.

3[6] CONNECTIVE:—Lat. *con*, together; *nectere*, to bind.

1[7] Distribution.

2[7] Elements.

1[8] CORPUSCLES:—Lat. *corpusculum*, a little body.

2[8] Yellow, elastic fibers.

3[8] FIBRILLAE:—Lat. *fibrilla*, a small fiber.

3[7] Examples.

1[8] LIGAMENTS:—Lat. *ligare*, to bind. White, elastic bands, connecting bones at the joints.

2[8] TENDONS:—Lat. *tendere*, to stretch. White, elastic cords, connecting muscles with bone.

3[8] FASCIA:—Lat. *fas*, a band. The thin, tendinous, investment of muscle.

4[8] FIBRO-CARTILAGE.

4[6] ADIPOSE:—Lat. *adeps*, fat.

1[7] Location.

2[7] Cells.

1[8] Nucleus.

2[8] Cell wall.

3[8] Cell contents.

5[6] BONE:—Sax. *ban*, a firm, hard substance composing the skeleton of animals.

1[7] COMPOSITION.

1[8] ORGANIC MATTER:—Lat. *organicus*, vital.

1[9] Predominates when ?

2[9] Removal.

2[8] INORGANIC:—Lat, *in*, not, and *organicus*, vital.

1[9] Phosphate of lime.

2[9] Phosphate of magnesium.

3[9] Carbonate of lime.
4[9] Sodium chloride.
5[9] Predominates when?
6[9] Removal.

2[7] Minute Anatomy.
1[8] Haversian canals.
2[8] LACUNAE:—Lat. *lacuna*, a small lake.
3[8] CANALICULI:—Lat. *canalicula*, a small canal.
4[8] Haversian rods.
5[8] Mineral.

3[7] Structure.
1[8] Compact tissue.
2[8] CANCELLOUS TISSUE:—Lat. *cancelli*, lattice work.
3[8] MEDULLARY CANALS.

4[7] MARROW:—A fatty, semi-solid substance occupying the medullary canal.
5[7] PERIOSTEUM:—Gr. *peri*, around, and *osteon*, a bone.
6[7] ENDOSTEUM;—Gr. *endon*, within, and *osteon*, a bone.
7[7] OSSIFICATION:—Lat. *os*, bone, *facere*, to make.
1[8] How performed.
2[8] Centers of.

6[6] TEETH.
1[7] DEFINITION:—Small, hard bodies, imbedded in the jaws, and used in seizing and masticating food.

2[7] CLASSES OF MATTER.

1[8] DENTINE:--Lat. *dens*, tooth. The substance of the teeth surrounding the pulp and covered by the enamel and cementum.

2[8] CEMENTUM:- Lat. *caementum*, marble chips. A calcareous substance investing the fang of the tooth.

3[8] ENAMEL:--Lat. *in*, upon, and *amel*, to form a glossy surface. The smooth, vitreous substance covering the crown of the tooth.

3[7] PARTS.

1[8] CROWN:—Portion of the tooth above the gum.

2[8] NECK:—The part of the tooth to which the gum adheres.

3[8] FANG:—The part of the tooth imbedded in the jaw.

4[7] STRUCTURE.

1[8] PULP:—A .mass of nerves and blood vessels entering the tooth at the apex of the fang, and occupying the central cavity.

2[8] Layer of dentine.

3[8] Layer of cementum.

5[7] Development.

1[8] Method.

2[8] Sets.

1[9] Temporary.
1[10] Names.
1[11] INCISORS:—Lat. *incidere*, to cut.
2[11] CUSPIDS:—Lat. *cuspis*, a point.
3[11] MOLAR:—Lat. *molaris*, a grindstone.
2[10] When erupted.
2[9] Permanent.
1[10] Names.
1[11] Incisors.
2[11] Cuspids.
3[11] Bicuspids.
4[11] Molars.
2[10] When erupted.

7[6] MUSCULAR TISSUE.
1[7] DEFINITION:—Masses of red tissue with the power of contractility.
2[7] KINDS.
7[8] STRIATED:—Lat. *striatum*, stripe.
1[9] Description.
2[9] Location.
3[9] Elements.
1[10] Ultimate fibers.
2[10] SARCOLEMMA:—Gr. *sarkos*, flesh, and *lemma*, coat. A delicate, transparent membrane ensheathing the striated material.

2[8] Unstriated.
1[9] Description.
2[9] Where found.
3[9] Characteristics.
1[10] Hollow.
2[10] Involuntary.

8[6] NERVOUS:—Gr. *neuron*, a string.
1[7] DEFINITION:—Those tissues by means of which we receive impressions and produce muscular action.
1[8] White.
2[8] Gray.
2[7] Elements.
1[8] Nerve fibers.
1[9] Location.
2[9] Parts.
1[10] Tubular sheath.
2[10] Medullary sheath.
3[10] Axis cylinder.
2[8] Nerve cells.
1[9] Location.
2[9] Elements.
1[10] Cell wall.
2[10] Cell contents.
3[10] Nucleus.
4[10] Nucleolus.
5[10] POLES:—Projections from nerve cells.
3[9] Kinds.

1[10] APOLAR:—Lat. *a*, without, and *polus*, a pole. Without a projection.

2[10] UNIPOLAR:—Lat. *unus*, one, and *polus*. With one projection.

3[10] BIPOLAR:—Lat. *bis*. twice, and *polus*.

4[10] MULTIPOLAR:—Lat. *multum*, many, and *polus* With many projections.

2[3] OSTEOLOGY.—Gr *osteon*. bone, and *logos*, discourse.

1[4] DEFINITION:—That branch of Anatomy which treats of the skeleton.

2[4] SKELETON:—Gr. *skeletos*, dried up.

1[5] DEFINITION:—The bony framework of the body.

2[5] ORGANS:—Gr. *organon*, an instrument

1[6] BONES:—The solid, hard portions of the skeleton.

1[7] KINDS.

1[8] LONG:—A bone having a shaft and two enlarged extremities.

2[8] SHORT:—A mass of bone with more than two surfaces.

3[8] FLAT:—A bone having two surfaces separated by borders.

4[8] IRREGULAR:—A bone whose form will not admit of a geometrical description.

2[7] MEMBRANES.

1[8] PERIOSTEUM:—Gr. *peri*, around, and *osteon*.

1[9] DESCRIPTION:—A dense, fibrous membrane adherent to, and investing bones.

2[9] FUNCTIONS.

2[8] ENDOSTEUM:—A membrane lining the medullary canal.

3[7] Groups.

1[8] Head.

1[9] CRANIUM:—Gr. *kranion*, head. That group of bones which envelop the brain.

1[10] FRONTAL:—Lat *frons*, front.

2[10] PARIETAL:—Lat. *paries*, a wall.

3[10] TEMPORAL:—Lat. *tempus*, time.

1[11] SQUAMOUS PORTION:—Lat. *squama*, a scale.

2[11] MASTOID PORTION:—Gr. *mastos*, nipple, and *eidos*, like.

3[11] PETROUS PORTION:—Gr. *petra*, a rock.

4[10] OCCIPITAL:—Lat *oc*, on, and *caput*, a head.

5[10] ETHMOID:—Gr. *ethmos*, a sieve, and *eidos*.

6[10] SPHENOID:—Gr. *sphen*, a wedge, and *eidos*.

2[9] Face.

1[10] NASAL:—Lat. *nasus*, nose.

2[10] LACHRYMAL:—Gr. *lakryma*, a tear.

3[10] SUPERIOR MAXILLARY:—Lat. *super*, above, and *maxilla*, a jaw.

4[10] PALATE:—Lat. *palatium*, the roof of the mouth.

5[10] VOMER:—Lat. *vomer*, plow-share.

6[10] SUPERIOR TURBINATED:Lat. *turban*, a top.

7[10] MALAR:—Lat. *mala*, a cheek.

8[10] INFERIOR MAXILLARY:—Lat. *inferus*, below, and *maxilla*.

3[9] EAR.

1[10] INCUS:—Lat. *incus*, an anvil.

2[10] MALLEUS:—Lat. *malleus*, a mallet.

3[10] ORBICULAR:—Lat. *orbis*, a circle.

4[10] STAPES:—Lat. *stapes*, a stirrup.

2[8] TRUNK:—Lat. *truncus*. The principal part of the body to which the limbs are attached.

1[9] THORAX:—Gr. *thorax*, a coat of mail. That portion of the trunk enveloping the chief organs of circulation and respiration.

1[10] SPINAL COLUMN.

1[11] VERTEBRÆ:—Lat. *vertere*, to turn.

1[12] PARTS.

1[13] BODY.

2[13] PROCESSES:—Lat. *procedere*, to go forward.

1[14] TRANSVERSE:—Lat. *trans*, across, and *vertere*. Bony eminences projecting from the sides of vertebræ.

2[14] ARTICULAR:—Lat. *articulus*, a small joint.

1[15] Superior.

2[15] Inferior.

3[14] SPINOUS:—Lat. *spina*, a thorn.

2[12] GROUPS.

1[13] CERVICAL:—Lat. *cervix*, neck.

2[13] DORSAL:—Lat. *dorsum*, back.

3[13] LUMBAR:—Lat. *lumbus*, loin.

2[10] RIBS:—Sax. *rib*.

1[11] TRUE:—Ribs attached to the sternum by an independent cartilage.

2[11] FALSE:—Ribs whose cartilage blends with the next cartilage above.

3[11] FLOATING:—Ribs which have no cartilaginous attachment in front

4[11] PARTS.

1[12] HEAD:—The enlarged vertebral extremity.

2[12] NECK:—The constriction in front of the head.

3[12] TUBERCLE:—The eminence which articulates with the transverse processes.

4[12] ANGLE:—Point where the degree of curvature changes.

5[11] ARTICULATION:—Lat. *articulus*, a small joint.

3[10] STERNUM.—Gr *sternon*, solid.

1[11] PARTS.

1[12] MANUBRIUM:—Lat. *manubrium*, handle. The uppermost broad portion of the sternum.

2^{12} GLADIOLUS:—Lat. *gladius*, a sword. The middle expanded portion of the sternum.

3^{12} ENSIFORM APPENDIX:—Lat. *ensis*, sword, and *forma*, form. The cartilaginous lower extremity of the sternum.

2^{11} ARTICULATION.

2^{9} PELVIS:—Lat, *pelvis*, a basin.

1^{10} INNOMINATA:—Latin *in*, without, and *nomen*, name The hip-bone.

1^{11} ILIUM:—Lat. *ilium*, the flank.

2^{11} ISCHIUM:—Gr. *iskhion*, I support.

3^{11} PUBES:—Lat. *pubes*, mature, grown up.

2^{10} SACRUM:—Lat. *sacer*, holy, sacred.

2^{10} COCCYX:—Gr. *coccyx*, cuckoo.

3^{8} Extremities.

1^{9} Upper.

1^{10} Shoulder.

1^{11} CLAVICLE:—Lat. *clavis*, a key.

2^{11} SCAPULA:—Lat. *scapulum*, shoulder-blade.

2^{10} ARM-HUMERUS:—Lat. *humerus*, shoulder.

3^{10} FOREARM.

1^{11} RADIUS:—Lat. *radius*, a spoke.

2^{11} ULNA:—Lat. *ulna*, the elbow.

4^{10} HAND.

1^{11} CARPUS:—Gr. *karpos*, the wrist.

1^{12} FIRST ROW.

1^{13} SCAPHOID:—Gr. *skaphe*, boat, and *eidos*.

2^{13} SEMILUNAR:—Latin, *semi*, half, and *lunar*, moon.

3^{13} CUNEIFORM:—Latin, *cuneus*, a wedge, and *forma*.

4^{13} PISIFORM:—Lat. *pisi*, a pea, and *forma*

2^{12} SECOND ROW.

1^{13} TRAPEZIUM:—Greek, *trapezion*, a trapezium.

2^{13} TRAPEZOID:—Greek, *trapezion* and *eidos*.

3^{13} OS MAGNUM:—Lat. *os*, bone and *magnum*, large.

4^{13} UNCIFORM:—Lat. *uncus*, hook and *forma*.

2^{11} METACARPUS:—Gr *meta*, after, and *karpos*.

3^{11} PHALANGES:—Gr, *phalanx*, a row of soldiers.

2^{9} LOWER EXTREMITIES.

1^{10} THIGH-FEMUR:—Latin, *femur*, thigh.

2^{10} LEG.

1^{11} PATELLA:—Lat. *patera*, a bowl.

2^{11} FIBULA:—Lat. *fibula*, a brace or clasp.

3^{11} TIBIA:—Lat. *tibia*, flute.

3^{10} FOOT.

1^{11} TARSUS:—Gr. *tarsos*, posterior part of the foot.

1^{12} ASTRAGALUS:—Gr. *astragalos*, a die, base of a column.

2^{12} OS CALCIS:—Latin, *os calx*, the heel.

3^{12} Scaphoid.

4^{12} Cuneiform.

5^{12} Unciform.

1^{13} External

2^{13} Middle.

3^{13} Internal.

6^{12} CUBOID:—Gr. *kubos*, a cube, and *eidos*.

2^{11} METATARSUS:—Gr. *meta*, beyond, and *tarsus* broad.

3[11] PHALANGES.

4[8] IRREGULAR.

1[9] HYOID BONE:—Gr. letter *u*, *eidos*.

2[9] SESAMOID BONE:—Gr. *sesame*, a grain of sesanum, and *eidos*.

3[9] WORMIAN:—Name of an anatomist.

2[6] LIGAMENTS:—Lat. *ligamentum*.

1[7] DEFINITION.

2[7] KINDS.

1[8] CAPSULAR.:—Gr. *capsa*, a chest. A ligament investing a joint, its fibers at right angles to the joint opening.

2[8] Deepening.

3[8] Strengthening.

4[8] ANNULAR:—Lat. *annulus*, a ring Investing a joint, its fibers parallel to the joint opening.

3[6] SYNOVIAL MEMBRANE:—Gr *syn*, with, and *oon*, egg.

1[7] DEFINITION:—A sack containing synovia for lubrication.

2[7] CLASSES.

1[8] ARTICULAR, adherent to the ends of bones in joints.

2[8] BURSAL:—Gr. a leathern bottle A sack between the tendons and bones.

3[8] VAGINAL:—Lat. *vagina*, a sheath. A membrane investing a tendon

3[7] Functions.

3[6] Articulations.

1[6] Definition.

2[6] Classes.

1[7] SYNARTHROSIS:—Gr. *syn*, with, and *arthroses*, articulation.

1[8] DEFINITION: An immovable joint.

2[8] Examples.

1[9] SUTURES:—Latin, *suere*, to stitch. A joint formed by dovetailing the edges of bone together.

2[9] HARMONIA:—Gr. *harmonia*. A joint formed by rough surfaces perfectly adapted.

3[9] SCHYNDYLESIS:—Gr. *schindelo*, I split into small pieces A joint formed by the margin of a plate of bone fitting into a groove of another bone.

4[9] GOMPHOSIS:—Gr. *gomphos*, a nail. A bone fit'ed into a depression of another bone,

2[7] AMPHIARTHROSIS:—Gr. *amphi*, on all sides, and *arthrosis*. A joint producing slight motion in all directions.

3[7] DIARTHROSIS:—Gr. *dia*, through, *arthrosis*.

1[8] DEFINITION:—A very movable joint.

2[8] Examples.

1[9] ARTHRODIA:—Gr. *arthron*, a joint. A joint where one bone glides upon another.

2[9] GINGLYMUS:—Gr. *ginglymos*, a hinge. A joint permitting motion in one plane.

3[8] MUSCLES:—Masses of red, contractile tissue.

1[4] Composition.

1[5] MYOSIN:—Gr. *mus*, a mouse. An albuminous substance coagulable after death.

2[5] Salts.

1[6] Phosphate.

2[6] Potash.

3[5] Extractives.

1[6] KREATIN:—Gr. *kreatos*, flesh. Nitrogenous waste of muscle.

2[6] LACTIC ACID:—Lat. *lac*, milk.

2[4] Color.

3[4] Classes.

1[5] Hollow.

1[6] Description.

2[6] Locations.

1[7] Blood Vessels.

2[7] LYMPHATICS:—Lat. *lympha*, water.

3[7] Ducts.

4[7] Alimentary canal.

5[7] Heart.

6[7] Iris.

2[5] Striated.
1[6] Description.
2[6] Location.
4[4] Function.
1[5] Attached to levers.
1[6] Definition of lever
2[6] Classes of levers
1[7] First.
1[8] Description.
2[8] Examples in the body.
1[9] Skull.
2[9] Arm.
3[9] Foot
2[7] Second.
1[8] Description.
2[8] Examples in the body.
1[9] Thigh bone.
2[9] Ribs depressed.
3[9] Foot
3[7] Third.
1[8] Description
2[8] Examples in the body.
1[9] Arm.
2[9] Leg.
3[9] Head
2[5] To give outline to body.
3[5] To protect delicate organs
4[5] To produce motion.
1[6] Cause of contraction.

2[6] Kinds of motion.

1[7] FLEXION:—Lat *flexio*, a bender. Causing extreme ends of articulating bones to approach each other.

2[7] EXTENSION:—Lat. *ex*, out, and *tendo*, I stretch. Causing extreme ends of articulating bones to recede.

3[7] ABDUCTION:—Lat. *ab*, from and *duco*, I lead. Movement from the median line.

4[7] ADDUCTION:—Lat. *ad*, toward, and *duco*. Movement toward the median line.

5[7] ROTATION:—Lat. *rotare*, to turn round. Turning of a bone on its own axis.

6[7] CIRCUMDUCTION:—Latin, *circum*, around, and *duco*. Movement describing a cone, the apex at the joint.

5[4] Attachments.

1[5] Origin.

2[5] Insertion.

6[4] Names.

1[5] RECTI:—Lat. *rectus*, straight.

1[6] SUPERIOR:—O., apex of orbit. I., upper surface of eyeball.

2[6] INFERIOR:—O., apex of orbit. I., lower surface of eyeball.

3[6] INTERNAL:—O., apex of orbit. I., internal surface of eyeball

4[6] EXTERNAL:—O , apex of orbit. I., external surface of eyeball.

2[5] OBLIQUE:—Lat. *obliquus*, slanting.

1[6] SUPERIOR:—O., apex of orbit. I., back of eyeball.

2[6] INFERIOR:—O., internal, anterior part of orbit. I , outside of orbit.

3[5] LEVATOR PALPEBRÆ.—Lat. *levare*, to raise, and *palpebra*, an eyelid, from *palpitare*, to palpitate. O., apex of orbit. I., cartilage of eyelid.

4[5] ORBICULARIS PALPEBRARUM:—A circular muscle in the eyelid.

5[5] BUCCINATOR:—Lat, *buccinare*, to sound the trumpet. A fan-shaped muscle in the cheek.

6[5] ORBICULARIS ORIS:—Lat. *orbicular*, and *os*, mouth. A circular muscle in the lips around the mouth.

7[5] MASSETER:—Lat. *masselris*, I chew O., zygomatic arch. I., inferior margin. and posterior angle of jaw.

8[5] TEMPORAL:—Lat. *tempus*. O., temporal ridge of skull. I., the coronoid process of the lower jaw

9[5] INTERNAL PTERYGOID:—Gr. *pteron*, a wing, and *eidos*. O., external plate of pterygoid process. I., inner side of the angle of the jaw.

10[5] SCALENI:—Gr. *skalenos*, unequal.

1[6] ANTICUS:—Lat. *ante*, before. O., transverse processes of 3rd, 4th, 5th and 6th cervical vertebræ I., upper surface of first rib.

2[6] MEDIUS:—Lat. *medium*, middle. O., transverse processes of the six lower cervical vertebræ. I, first rib behind sub-clavian artery.

3[6] POSTICUS:—Lat. *post*, after. O, transverse processes of the three lower cervical vertebræ. I., posterior part of second rib.

11[5] TRAPEZIUS:—Gr. *trapeza*, a table. O, occipital bone, and spinous processes of dorsal vertebræ. I, external third of clavicle and spine of scapula.

12[5] LATISSIMUS DORSI:—Lat. *latus*, broad, and *dorsum*, back. O., sacrum, lumbar spines, and six lower dorsal spines. I., anterior ridge of bicipital groove and humerus.

13[5] PECTORALIS MAJOR:—Latin, *pectus*, breast, and *major*, larger. O., costal cartilages, sternum, internal third of clavicle. I., external ridge of bicipital groove.

14[5] PECTORALIS MINOR:—Lat. *pectus*, and minor. O., 3rd, 4th and 5th ribs. I., coracoid process of scapula.

15[5] DELTOID:—Greek letter delta and *eidos*. O., external 3rd of clavicle, acromion process, and spine of scapula. I., outer side and center of humerus.

16[5] LEVATORES COSTARUM:—Lat. *levator*, and *costa*. O., transverse processes of dorsal vertebræ. I., upper margin of rib, between tubercle and angle

17[b] EXTERNAL INTERCOSTALS. O., external inferior margin of rib. I., external superior margin of rib below.

18[b] INTERNAL INTERCOSTALS. O., internal superior margin of rib. I., internal inferior margin of rib above.

19[b] SERRATUS MAGNUS:—Lat. *serra*, a saw, and *magnus*, great. O., internal lip of vertebral border of scapula. I., nine superior ribs.

20[b] BICEPS:—Lat. *bis*, and *caput*. O., by two heads, coracoid process of scapula, and above head of scapula. I., tuberosity of radius.

21[b] TRICEPS:—Lat. *tri*, and *caput*. O., three heads, below head of scapula, and on external and internal surfaces of humerus. I., olecranon process of ulna.

22[b] ABDOMINAL:—Lat *abdere*, to conceal.

1[a] RECTUS. O., sternum and lower ribs. I., pubes of innominate bones.

2[a] EXTERNAL OBLIQUE. O., eight lower ribs, and extends downward and forward to median line and pelvis.

3[a] INTERNAL OBLIQUE. O., innominate bone; extends downward and forward.

23[b] SARTORIUS:—Lat. *sartor*, a tailor. O., anterior margin of ilium. I., inner side of upper end of tibia, below its tubercle.

24^5 QUADRICEPS EXTENSOR:—Lat *quatuor*, four, and *caput*. O., four heads from innominate bone and femur. I., superior margin of patella. Patella attached to tibia by ligamentum patellae.

25^5 GASTROCNEMIUS:—Gr. *gaster*, stomach. and *gemini*, twins. O., posterior surface of femur above condyles. I , os calcis.

26^5 SOLEUS:—Lat *solum*, sole-fish

4^3 Blood.

1^4 Definition.

2^4 Composition.

1^5 PLASMA:—Lat *plasmetus*, a thing formed.

1^6 Definition.

2^6 Water.

3^6 Salts.

4^6 Albumen.

1^7 Coagulable by heat.

2^7 Coagulable spontaneously.

2^5 Cruor-Corpuscles.

1^6 Red.

1^7 Size

2^7 Shape

3^7 Origin.

4^7 Destruction.

5^7 Function.

6^7 Number.

2^{6} White.
1^{7} Size,
2^{7} Shape.
3^{7} Origin.
4^{7} Destruction.
5^{7} Number.
6^{7} Amœboid movement.
3^{5} COAGULATION:—Lat. *co*, and *agere*. to bring together.
1^{6} How hastened
2^{6} How retarded.
3^{6} Why necessary.
3^{4} CIRCULATION.
1^{6} Definition.
2^{6} Organs.
1^{6} Heart.
1^{7} Shape.
2^{7} Size.
3^{7} Tissue.
4^{7} Location.
5^{7} Membranes.
1^{8} PERICARDIUM:—Gr. *peri*, and *kardia*, heart.
2^{8} Endocardium.
6^{7} Cavities.
1^{8} AURICLE:—Lat. *aurus*, ear.
1^{9} Right.
1^{10} Location
2^{10} Openings

1[11] SUPERIOR VEVA CAVA:—Lat. *vena*, vein, *cava*, a hollow.

2[11] INFERIOR VENA CAVA.

3[11] CORONARY SINUS:—Lat. *corona*, crown.

4[11] FORAMEN THEBESII: —From name of a German naturalist.

5[11] AURICULO-VENTRICULAR: Lat. *venter*, abdomen

2[9] Left.

1[10] Location.

2[10] Openings.

1[11] PULMONARY VEINS:—Gr. *pleumon*, lungs.

2[11] AURICULO-VENTRICULAR: Lat. *aurus*, and *venter*.

2[8] VENTRICLES:—Lat. *venter*.

1[9] Right.

1[10] Location.

2[10] Openings.

1[11] Auriculo-ventricular.

2[11] Pulmonary artery.

2[9] Left.

1[10] Location.

2[10] Openings.

1[11] Auriculo-ventricular.

2[11] AORTA:—Gr. *aorte*, suspended.

7^{7} Valves.
  1^{8} Location.
  2^{8} TRICUSPIDS:-Lat. *tri*, and *cuspis*.
    1^{9} Location.
    2^{9} Number.
  2^{8} BICUSPIDS:—Lat. *bis*, and *cuspis*
    1^{9} Location.
    2^{9} Number
  4^{8} Semilunar
    1^{9} Location.
    2^{9} Number.
  5^{8} Parts.
    1^{9} Membrane.
    2^{9} CHORDAE TENDINAE:—Greek, *khordi*, a cord, and *tendo*, I stretch.
    3^{9} COLUMNÆ CARNÆ:—Lat. *columna*, column, and *caro*, flesh.
8^{7} Movements.
  1^{8} DIASTOLE:—Gr. *dia*, through, and *stello*, I dilate.
  2^{8} SYSTOLE:—Gr *sys*, and *stello*, I send
9^{7} Sounds.
  1^{8} First.
    1^{9} Where heard
    2^{9} Cause.
  2^{8} Second.
    1^{9} Where heard.

2[9] Cause.

2[6] ARTERIES:—Gr. *aer*, air, and *terein*, to preserve.

1[7] Definition.

2[7] Location.

3[7] Method of branching.

4[7] Coats.

1[8] Cellular.

2[8] Muscular.

3[8] SEROUS:—Lat. *serum*, whey

5[7] Nerves.

3[6] CAPILLARIES:—Lat. *capillus*, hair like.

1[7] Definition.

2[7] Location

3[7] Coats.

4[6] VEINS:—Lat. *vena*.

1[7] Definition.

2[7] Location

3[7] Coats.

1[8] Cellular.

2[8] Muscular

3[8] Serous

4[7] Valves.

5[7] Nerves.

3[5] Systems.

1[6] Arterial

1[7] Kind of blood.

2[7] Character of flow.

3^{7} Cause of flow.

2^{6} Capillary system.

1^{7} Character.

2^{7} Cause of flow.

3^{6} Venous system.

1^{7} Kind of blood.

2^{7} Character of flow.

3^{7} Cause of flow.

4^{6} Cardiac.

1^{7} Kinds of blood.

2^{7} Cause of movement.

4^{5} Pulse.

1^{6} Definition.

2^{6} Cause.

3^{6} Frequency.

1^{7} At different ages.

2^{7} During emotion.

3^{7} During sickness.

5^{5} Names of arteries.

1^{6} Aorta.

1^{7} ARCH:—The curved portion at the beginning of the vessel.

2^{7} THORACIC:—Gr. *thorax*, a coat of mail. Extends from the arch to the diaphragm.

3^{7} ABDOMINAL. Extends from diaphragm to the fourth lumbar vertebræ.

2^{6} CORONARY:—Lat. *corona*, a crown.

1[7] Right; supplies the right side of the heart.

2[7] Left; supplies the left side of the heart.

3[6] INNOMINATE. Rises from the upper right side of the arch, and extends upward one inch and a half to sternal end of clavicle, and divides into the right subclavian and common carotid.

4[6] CAROTIDS:—Gr. *karos*, stupor.

1[7] Common.

1[8] RIGHT:—Extends from innominate upper margin of larynx.

2[8] LEFT:—Extends from arch on left side to upper margin of larynx,

2[7] EXTERNAL:—Extends from the common c., upward and outward to supply side of head and face.

3[7] INTERNAL:—Extends from c. c. into skull through petrous portion of temporal bone, and supplies the brain, its membranes, and the eye.

5[6] SUBCLAVIAN:—Extends from the innominate under the clavicle, to the lower border of the first rib.

1[7] Right.

2[7] Left.

2^6 AXILLARY:—Lat. *ala*, wing, signifies the arm-pit. An extension of the sub-clavian through the arm-pit.

7^6 BRACHIAL:—Gr. *brachion*, arm. From axillary in the arm, to a point one-half inch below the elbow.

8^6 RADIAL:—Extends along radius to the hand.

9^6 ULNAR:—Extends along ulna to the hand.

10^6 INTERCOSTALS:—Ten pairs, each resting in a groove along the internal inferior margin of the rib.

11^6 CŒLIAC AXIS:—Branches from abdominal aorta near the diaphragm, one-half inch in length, and divides into three branches.

1^7 SPLENIC:—Branch of cœliac axis, and is distributed to the spleen.

2^7 GASTRIC:—Branch of cœliac axis, and is distributed to the stomach

3^7 HEPATIC:—Greek, *hepatos*, liver Branch of cœliac axis, distributes blood to liver and stomach

12^6 SUPERIOR MESENTERIC:—Gr. *meso*, middle, and *enteron*, intestine. Branch of abdominal aorta, behind pancreas. Supplies small intestine, cœcum, and the ascending and transverse colon.

13^6 Branch of abdominal aorta, about two inches above its division into the common iliacs. Distributed to

descending colon, sigmoid flexure and rectum.

14^6 RENAL:—Lat. *ren*, kidney. Across from the abdominal aorta directly to the kidney.

15^6 ILIAC:—Lat. *ilia*, flanks.

1^7 COMMON:—The two arteries which result from the division of the aorta at its lower part.

1^8 Right.

2^8 Left.

2^7 EXTERNAL:—Extends from common ialic to femoral arch at the margin of the pelvis.

3^7 INTERNAL:—Distributed to the organs of the pelvis.

16^6 FEMORAL:—Lat. *femur*, thigh. Extends from femoral arch along the front and inner side of thigh to its lower third, where it becomes the popliteal.

17^6 POPLITEAL:—Lat. *post*, behind, and *plico*, I fold. The space behind the knee. It lies wholly within the popliteal space

18^6 TIBIAL.

1^7 ANTERIOR:—Branch from popliteal passing downward in front of tibia.

2^7 POSTERIOR:—Branch from popliteal passing downward behind the tibia.

6^5 NAMES OF VEINS.

1^6 JUGULAR:—Lat. *jugulum*, throat. Returns the blood from the head and unites with the sub-clavians.

1^7 Right.

2^7 Left.

2^6 SUB-CLAVIANS:—Return the blood from the arms and unite with the jugulars to form the innominata.

1^7 Right.

2^7 Left.

3^6 VENA CAVA:—Lat. *vena*, a vein, and *cava*, a hollow.

1^7 SUPERIOR:—Formed of the right and left innominates, and emptying into the right auricle.

2^7 INFERIOR:—Receives blood from lower extremities, abdomen and chest, and empties into the right auricle.

4^6 PORTAL:—Lat. *porta*, a gate. Formed by gastric, splenic, and superior and inferior mesenteric veins. It is about two and one-half inches long and enters the liver at the under surface of the transverse fissure.

5^6 GASTRIC:—Receives blood from the stomach and helps to form the portal vein.

6^6 SPLENIC:—Conveys the blood from the spleen to the portal vein.

7[6] HEPATIC:—Collects all the blood from the liver and conveys it to the ascending vena cava.

8[6] SUPERIOR MESENTERIC : — Collects blood from the region supplied by the superior mesenteric artery and unites with the portal vein.

9[6] INFERIOR MESENTERIC : — Collects blood from the region supplied by the inferior mesenteric artery and unites with portal vein.

10[6] SAPHENOUS:—Gr. *saphes*, manifest. Large subcutaneous of the leg, and unites with the femoral.

11[6] VENA COMITES:—Lat. *vena*, and *comes*, an associate.

5[4] RESPIRATION:—Lat. *respiro*, I breathe.

1[5] Definition.

2[5] Organs,

1[6] LARYNX:—Gr. *larynx*, voice box.

1[7] Definition.

2[7] Cartilages.

1[8] THYROID:—Gr. *thyra*, folding-door and *eidos*.

2[8] CRICOID:—Gr. *krikos*, a ring, and *eidos*.

3[8] ARYTENOID:—Gr. *arytaena*. a ladle, and *eidos*,

4[8] EPIGLOTTIS:—Gr. *epi*, and *glottis*, the mouth-piece of a flute.

3[7] Membranes.

1[8] Crico-thyroid.

2^{8} Thyro-hyoid.

4^{7} Vocal cords.

1^{8} False.

2^{8} True.

1^{9} Attachments.

2^{9} Action.

3^{9} Comparison in male and female.

5^{7} Muscles.

1^{8} Intrinsic.

2^{8} Extrinsic.

6^{7} Nerves.

1^{8} Recurrent laryngeal

2^{8} External laryngeal.

7^{7} Ventricles.

2^{6} TRACHÆ:—Gr. *trakhus*, rough

1^{7} Definition.

2^{7} Diameter.

3^{7} Length.

4^{7} Tissues.

1^{8} Incomplete fibro, cartilaginous rings.

2^{8} Mucous membranes.

3^{8} Muscular fibers.

4^{8} Connective tissue.

5^{7} Functions.

3^{6} BRONCHI:—*bronchion*, wind-pipe divisions of the trachea

1^{7} Right.

2^{7} Left

3[7] Differences.
4[7] Functions.
4[6] LUNGS:—Sax. *lunge*.
1[7] Definition.
2[7] Right.
3[7] Left.
4[7] Shape.
5[7] Weight.
6[7] Color.
7[7] Lobes.
8[7] Root.
1[8] Location.
2[8] Organs composing,
1[9] Bronchi.
2[9] Pulmonary vessels.
3[9] Nerves.
4[9] Lymphatics.
5[9] Bronchial artery.
6[9] Connective tissue.
9[7] PLEURA:—Gr. *pleura*, the side.
1[8] Definition.
2[8] Layers.
1[9] Parietal.
2[9] Visceral.
10[7] Air sacs.
11[7] Air cells.
12[7] PARENCHYMA:—Gr. *parenkhyuma*, effusion.
13[7] Source of blood.

1[8] Bronchial artery.

2[8] Pulmonary artery.

14[7] Nerves.

2[8] PNEUMOGASTRIC:—Gr. *pneuma*, air, and *gastric*.

2[8] Sympathetic.

15[7] Vital capacity.

5[6] DIAPHRAGM:—Gr. *phrasso*, I close, and *dia*.

1[7] Definition.

2[7] Shape.

3[7] Attachments.

4[7] Layers.

1[8] Pleural and Cardiac.

2[8] Muscular.

3[8] PERITONEAL:—Greek, *teino*, I stretch, and *peri*.

5[7] PHRENIC NERVE:—Gr. *phren*, diaphragm.

6[7] Openings.

1[8] Vena cava.

2[8] OESOPHAGUS:—Gr. *oiso*, I carry, and *phago*, I eat.

3[8] AORTA:—Gr. *aorteomai*, I am suspended.

7[7] Function.

6[6] Muscle.

1[7] Inspiratory.

1[8] Diaphragm.

2[8] SCALENA:—Gr. *skalenos*, irregular or uneven.

1[9] ANTICUS:—Lat., before.

2[9] MEDIUS,—Lat,, middle.

3[9] POSTICUS:—Lat., posterior.

3[8] EXTERNAL INTERCOSTAL.

4[8] LEVATORES COSTARUM:—Latin, lifters of the ribs.

5[8] PECTORALIS MAJOR:—Lat., larger (muscle) of the breast.

6[8] PECTORALIS MINOR:-Lat., smaller (muscle) of the breast.

7[8] SERRATUS MAGNUS:—Lat., large saw-toothed (muscle.)

2[7] Expiratory,

1[8] Internal Intercostals.

2[8] Infra Costals.

3[8] Abdominal.

1[9] Obliquus External.

2[9] Obliquus Internal.

3[9] RECTUS ABDOMINUS:—Latin, straight abdominal (muscle.)

7[6] Ribs.

3[5] Parts.

1[6] Inspiration.

1[7] Definition.

2[7] Movements.

1[8] Sternum.

2[8] Of Ribs.

3^{8} Of Diaphragm.

4^{8} Effects of.

4^{5} Objects of,

1^{6} Furnish Oxygen.

1^{7} Oxydizes Chyle.

2^{7} To produce animal heat

2^{6} To remove waste matter.

5^{5} Air.

1^{6} Composition,

1^{7} OXYGEN:—Gr. *oxus*, acid, and *gennao*, I engender.

2^{7} NITROGEN:—Gr. *nitron*, and *gennao*.

3^{7} Carbon Dioxide.

2^{6} Changes.

1^{7} Loses Oxygen.

2^{7} Receives Carbon Dioxide.

3^{7} Receives Water.

3^{6} Kinds.

1^{7} Residual.

2^{7} Supplemental.

3^{7} Tidal.

4^{7} Complimental.

6^{4} DIGESTION:—Lat. *digere*, to digest

1^{5} Definition

2^{5} Processes.

1^{6} MASTICATION:—Lat. *masticare*, to chew.

2^6 INSALIVATION:—Lat. *in*, and *saliva*, spittle.

3^6 DEGLUTITION:—Lat. *de*, and *glutire*, to swallow.

4^6 CHYMIFICATION:—Lat. *chymus*, juice, and *facere*, to make.

5^6 CHYLIFICATION:—Lat. *chylus*, juice, and *facere*.

6^6 Separation.

7^6 Absorption.

3^5 Food.

1^6 Definition.

2^6 Classes.

1^7 Mineral.

1^8 Water.

1^9 Sources.

2^9 Uses.

2^8 Salts.

1^9 Sources.

2^9 Kinds.

1^{10} Phosphate of Lime.

2^{10} Phosphate of Magnesium.

3^{10} Carbonate of Lime.

4^{10} Sodium Chloride.

3^9 Uses.

2^7 ORGANIC:—Gr. *organon*, work. an instrument.

1^8 PROTEIDES:—Gr. *proteion*, to take first rank.

1^9 ALBUMEN:—Lat. *albus*, white.

2⁹ FIBRINE:—Lat. *fibra*, a filament, fibre.

3⁹ CHONDRINE:—Gr. *khondros*, cartilage.

4⁹ GELATINE:—Lat. *gelare*, to freeze, congeal.

5⁹ CASEINE:—Lat. *caseus*, cheese.

6⁹ MYOSIN:—Gr. *mus*, a mouse or rat.

7⁹ Sources.

8⁹ Uses.

2⁸ CARBONACEOUS:—Latin *carbo*, coal.

1⁹ Sugars.

1¹⁰ Sources.

2¹⁰ Kinds.

1¹¹ SUCROSE:–F. *sucre*, sugar.

2¹¹ LACTOSE:–Lat. *lac*, milk.

3¹¹ GLUCOSE:–Greek, *glukos*, sweet.

2⁹ Fats.

1¹⁰ Sources.

2¹⁰ Composition.

3⁹ Starch.

1¹⁰ Sources.

2¹⁰ Composition.

4⁹ Gums.

4⁵ Organs.

1⁶ Mouth.

2⁶ Teeth.

3[6] Salivary Glands.
1[7] Definition.
2[7] Class. (Racemos.)
3[7] Names.
1[8] PAROTID:—Gr. *para*, near, and *otos*, the ear.
1[9] Location.
2[9] Duct. (Steno's.)
3[9] Size and Weight.
2[8] SUBMAXILLARY:—Lat. *sub*, under, and *maxilla*, jaw.
1[9] Location.
2[9] Duct. (Wharton's.)
3[9] Size and Weight.
3[8] SUBLINGUAL:—Lat. *sub*, and *lingua*, tongue.
1[9] Location.
2[9] DUCT:—Lat. *ducere*, to lead
1[10] Ravini. (An anatomist.)
2[10] Bartholine. (An anatomist.)
3[9] Size and Weight.
4[7] Secretion—Saliva.
1[8] Composition.
1[9] Water.
2[9] Salts.
3[9] Pepsin.
2[8] Reaction.
3[8] FUNCTION:—Lat. *functio*, performing, executing.

5[7] Nerve Supply.

4[6] PHARYNX:—Gr. *pharo*, I cut or divide.

1[7] Definition.

2[7] Coats.

1[8] Mucous.

2[8] Muscular.

3[7] Length.

4[7] Openings.

1[8] Posterior Nares.

2[8] Eustachian Tubes. (After Eustachus.)

3[8] FAUCES:—Lat. gullet or throat

4[8] ŒSOPHAGUS:—Gr. *oiso*, I carry. and *phago*.

5[8] GLOTTIS:—Gr. *glottis*.

5[6] ŒSOPHAGUS:—Gr. *oiso*, and *phago*.

1[7] Definition.

2[7] Coats.

1[8] Mucous.

2[8] Areolar.

3[8] Muscular.

3[7] Length.

4[7] Diameter.

5[7] Function.

6[6] STOMACH:—Gr. *stomachos*.

1[7] Definition.

2[7] Shape.

3[7] Length.

4^{7} Width.
5^{7} Coats.
1^{8} Mucous.
2^{8} Muscular.
3^{8} SEROUS:—Lat *serum*.
6^{6} Apertures.
1^{8} CARDIAC:—Gr. *cardia*, the heart
2^{8} PYLORIC:—Gr. *pile*, a gate, and *ouros*, a guardian
7^{7} Glands.
1^{8} Mucous.
2^{8} PEPTIC:—Gr., *pepto*, I digest
1^{9} Location.
2^{9} Secretion—Gastric Juice
1^{10} Composition.
1^{11} Water.
2^{11} Salts.
3^{11} Acids.
4^{11} PEPSIN:—Gr. *pepto*.
2^{10} Reaction
3^{10} Amount.
8^{7} Relations.
9^{7} Movements.
10^{7} Functions.
11^{7} Nerve Supply
12^{7} Curvatures.
1^{8} Greater.
2^{8} Lesser.
7^{6} INTESTINES:—Lat. *intestinus*.

1[7] Definition.
2[7] Coats.
1[8] Mucous.
1[9] VILLI:—Lat. *villus*, a tuft of hair.
2[9] VALVULÆ CONNIVENTES:—Lat closing valves
2[8] Muscular
3[8] Serous.
3[7] Divisions.
1[8] Small.
1[9] Length
2[9] Sections.
1[10] DUODENUM:—Latin, *duodecimo*, twelve.
2[10] JEJUNUM:— Lat *jejunus*, empty.
3[10] ILIUM:—Gr *eileo*, I turn or twist.
3[9] Glands.
1[10] Brunner's (After Brunner.)
2[10] Solitare.
3[10] Agminated.
4[10] Lieberkuhn's. (After Lieberkuhn.
2[8] Large.
1[9] Divisions.
1[10] CŒCUM : — Latin, *cæcus*, blind.

1[11] Ilio Cœcal Valves.
2[11] Vermiform Appendix
2[10] COLON:—Gr *coilos*, hollow or *colno*, I arrest.
1[11] Ascending.
2[11] Descending.
3[11] Transverse.
3[10] RECTUM:—Lat. straight.
3[9] Flexures.
1[10] HEPATIC:—Gr *hepatos*, liver.
2[10] SPLENIC:—Gr. *splen*, the spleen.
3[10] SIGMOID:—Gr. *sigma* (*s*) and *eidos*.
3[9] Glands.
1[10] Mucous.
2[10] Solitare
4[7] Functions.
5[7] Nerve Supply.
6[7] Blood Supply.
8[6] Liver.
1[7] Description
2[7] Location.
3[7] Relation.
4[7] Shape.
5[7] Weight.
6[7] Lobes.
1[8] Right.

2[8] Left.

3[8] LOBUS CAUDATUS:—Lat. *lobus*, a lobe, and *cauda*, a tail.

4[8] LOBUS QUADRATUS:—Lat. *lobus*, and *quadratus*, a square

5[8] LOBUS SPIGELII. (After Spigelius.)

7[7] Vessels.

1[8] Hepatic Artery.

2[8] Lymphatic

3[8] Portal Vein

4[8] Hepatic Vein

5[8] Bile Duct.

1[9] Biliary.

2[9] Right Hepatic.

3[9] Left Hepatic.

4[9] CYSTIC:—Gr. *cystis*, a pouch

5[9] Common Bile Duct.

8[7] Fissures.

1[8] Longitudinal.

2[8] DUCTUS VENOSUS:—Lat *ductus* and *vena*

3[8] Transverse

4[8] Gall Bladder.

5[8] Vena Cava.

9[7] Ligament.

1[8] TERES:—Lat. *teres*, long and round.

2[8] Suspensory. (Broad)

3[8] Coronal.

4^{8} Lateral.
1^{9} Right.
2^{9} Left.
10^{7} Nerves.
1^{8} Pneumogastric.
2^{8} Sympathetic.
11^{7} Structure.
1^{8} Capsule of Glisson. (An anatomist.
2^{8} LOBULES:—Gr. *lobos*, a lobe
1^{9} Size.
2^{9} Structure.
1^{10} Connective Tissue.
2^{10} Veins.
3^{10} Hepatic Cells.
3^{8} Vessels.
1^{9} Vena Porta.
1^{10} Divisions.
1^{11} INTERLOBULAR:—Lat. *inter* and *lobus*.
2^{11} Lobular.
3^{11} Intralobular.
4^{11} Sublobular.
2^{10} Distribution.
2^{9} Hepatic Artery.
1^{10} Vaginal.
2^{10} Capsular.
3^{10} Intralobular.
3^{9} Bile Ducts.

4[9] Hepatic Veins.

12[7] Secretion—Bile

1[8] Composition.

1[9] Water.

2[9] Solids.

1[10] BILIRUBIN:—Lat. *bilis*, bile, and *rubus*, red.

2[10] BILIVERDIN:—Lat *bilis*, and *viridis*, green.

3[10] CHOLESTERINE:—Gr. *khole*, bile and *stear*, suet.

4[10] Salts.

1[11] GLYCOCHOLATE OF SODA Gr. *glykus*, sweet, and *khole*.

2[11] TAUROCHOLATE OF SODA Gr *tauros*, ox. and *khole*

2[8] Color.

3[8] Amount.

4[8] Reaction.

5[8] Supposed Function.

1[9] Promote Absorbtion.

2[9] Promote Peristalsis.

3[9] Emulsify Fats.

13[7] GLYCOGENIC FUNCTION:—Gr. *glykus*, sweet, and *genesis*.

9[6] PANCREAS:—Gr. *pan*, all, and *kreao*, flesh.

1[7] Definition.

2[7] Relations.
3[7] Shape.
4[7] Ducts.
5[7] Secretion—Pancreatic Juice.
1[8] Composition.
1[9] Water.
2[9] Pancreatin.
3[9] Salts.
2[8] Functions.
1[9] Convert Starch into Sugar.
2[9] Emulsify Fats.
3[9] Dissolve Albumen.

7[4] ABSORBTION:—Lat. *ab*, and *sorbere*, to suck up.
1[5] Definition.
2[5] Organs.
1[6] Lymphatics.
1[7] Origin
2[7] Course.
3[7] Coats.
1[8] Fibrous.
2[8] Muscular.
3[8] Cellular.
4[7] Communications.
5[7] VALVES:—Lat. *valvo*, I fold up.
6[7] Kinds.
1[8] SUPERFICIAL:—Lat. *superficies*, surface.
2[8] Deep.

7⁷ Function.

2⁶ GLANDS:—Lat. *glans*, an acorn or kernel.

1⁷ Definition.

2⁷ Structure.

3⁷ Vessels.

1⁸ AFFERENT:—Lat. *ad*, to, and *fero*, I carry.

2⁸ EFFERENT:—Lat *e*, from, and *fero*.

4⁷ Kinds.

1⁸ Lymphatic.

1⁹ Location.

2⁹ Function.

2⁸ Mesenteric.

1⁹ Location.

2⁹ Function.

3⁶ LACTEAL:—Lat. *lac*

1⁷ Definition.

2⁷ Structure.

3⁷ Origin.

4⁷ Course.

5⁷ Functions.

4⁶ THORACIC DUCT:—Lat. *thorax* a breast-plate, and *ductus*

1⁷ Definition

2⁷ Structure

3⁷ Origin

4⁷ Course

5[7] Length.
6[7] Diameter.
7[7] Coats.
8[7] Termination
9[7] Function.

3[5] Kinds.

1[6] INTERSTITIAL:—Lat. *inter*, and *sistere*, to place.

2[6] EXCRETORY:—Lat. *ex*, and *cernere*, to separate.

3[6] CUTANEOUS:—Lat. *cutis*, skin
4[6] Respiratory.
5[6] Venous.
6[6] Lacteal.

8[4] SECRETION:—Lat. *secerno*, I separate.

1[5] Definition.

2[5] Organs.

1[6] FOLLICLES:—Lat *follis*, a bag.

1[7] Definition.
2[7] Structure.
3[7] Location.
4[7] Functions.

2[6] Glands.

1[7] Definition.
2[7] Structure.

1[8] Cells.
2[8] Blood Vessels.
3[8] Lymphatics.
4[8] Nerves.

5[8] Ducts.

3[7] Names.

1[8] Liver.

2[8] Salivary.

3[8] Pancreas.

4[8] Kidney.

5[8] Perspiratory.

6[8] Sebaceous.

7[8] Peptic.

4[7] Function.

3[5] Kinds.

1[6] EXCREMENTITIOUS:—Lat. *ex*, and *cernere*.

2[6] RECREMENTITIOUS:—Lat. *re*, return again, and *cernere*,

9[4] Animal heat.

1[5] Definition.

2[5] Source.

3[5] Distribution.

4[5] Necessity.

5[5] Quantity.

6[5] Variations.

7[5] Local Productions.

8[5] Equalization of Temperature

9[5] Local Elevation.

10[5] Regulation.

1[6] By Variation of Production

2[6] By Variation of Loss.

11[5] Modifications.

1⁶ By Food.
2⁶ By Exercise.
3⁶ Age.
4⁶ Clothing.
1⁷ Kind for different Climates.
2⁷ Kind for different Seasons

10⁴ Skin.
1⁵ Definition.
2⁵ Layers.
1⁶ CUTIS VERA :—Lat. *cutis*, and *vera*. true.
1⁷ Definition.
2⁷ Structure.
1⁸ Fibro-areolar
2⁸ Blood Vessels
3⁸ Lymphatics.
4⁸ Nerves.
3⁷ Parts.
1⁸ CORIUM:—Gr. *korion*, leather.
1⁹ Definition.
2⁹ Structure.
2⁸ Papillary Layer.
1⁹ Definition.
2⁹ Structure.
4⁷ Glands.
1⁸ PERSPIRATORY : — Latin, *per*, through, and *spirare*, to breathe.
1⁹ Definition.

2[6] Location.

3[9] Secretion—Perspiration

1[10] Composition.

2[10] Amount.

3[10] Function.

4[9] Ducts.

1[10] Form.

2[10] Length.

2[8] SEBACEOUS:—Lat *sebum*, tallow. suet.

1[9] Definition.

2[9] Location.

3[9] Structure.

4[9] Secretion.

5[9] Ducts.

6[9] Function.

3[8] CERUMINOUS:—Lat. *cera*, wax

1[9] Definition.

2[9] Location.

3[9] Function.

2[6] Cuticle.

1[7] Definition.

2[7] Layers.

1[8] STRATA MUCOSUM:—Lat. *stratum*, layer, and *mucus*

1[9] Structure.

2[9] Location.

3[9] Function.

2[8] STRATA CORNUM: — Lat. *stratum*, and *cornus*, horn.

1[9] Location.

2[9] Structure.

3[9] Function.

1 1[4] NERVOUS SYSTEM

1[5] Definition.

2[5] Systems.

1[6] CEREBRO-SPINAL: — Lat. *cerebrum*, brain, and *spina*, back-bone.

1[7] Definition.

2[7] Divisions.

1[8] Brain.

1[9] Definition.

2[9] Parts.

1[10] CEREBRUM:- Gr. *kara*, head.

1[11] Definition.

2[11] Size.

3[11] Shape.

4[11] Convolutions.

5[11] Fissures.

1[12] Superior Longitudinal.

2[12] Rolando. (An anatomist.)

3[12] Sylvius. An anatomist.)

6[11] Division.

1[12] Lobes.

1[13] Anterior.

2^{13} Median.

3^{13} Posterior.

2^{12} CORPUS CALLOSUM: — Lat. *corpus*, body, and *callum*, hard. A white band of nervous tissue connecting the hemispheres of the cerebrum.

3^{12} OPTIC THALAMUS:–Gr. *optomai*, I see, and *thalamos*, a bed. Two large oval bodies in the base of the cerebrum from which the optic nerves were supposed to arise.

4^{12} CORPORA QUADRIGEMINI:–Lat. *corpor*, bodies, and *quatuor*, four, and *gemini*, double. Four eminences at the posterior and inferior part of the middle lobe of the cerebrum. They give origin to the optic nerves.

7^{11} Hemispheres.

1^{12} Right.

2^{12} Left.

8^{11} VENTRICLES:—Five cavities near the base of the brain communicat-

ing with each other and the central canal of the spinal cord. Function unknown.

9^{11} Function.

2^{10} Cerebellum.

1^{11} Definition.

2^{11} Shape.

3^{11} Size.

4^{11} Fissures.

5^{11} Function.

3^{10} MEDULLA OBLONGATA:—Lat. *medius*, and *oblongus*, oblong.

1^{11} Definition.

2^{11} Shape.

3^{11} Size.

4^{11} Divisions.

1^{12} CORPORA PYRAMIDALIA: Lat. *corpus*, and *pyramis*, a pyramid. Two pyramids of white matter on either side of the anterior median fissure.

2^{12} OLIVARY BODIES:—Lat. *oliva*, an olive. Two oval masses behind the corpora pyramidalia.

3^{12} RESTIFORM BODIES:—Lat. *restis*, a rope, and

forma, Largest columns of the medulla situated in front of the posterior pyramids.

4[12] Posterior Pyramids:— Two narrow white cords placed one on each side of the posterior median fissure.

5[12] Pons Varolii:— Lat. *pons*, a bridge, and Varolius, an anatomist. The bond of union between the various segments of the brain.

5[11] Function.

3[9] Membranes.

1[10] Dura Mater:—Lat. *durus*, hard, and *mater*, mother.

1[11] Definition.

2[11] Structure.

3[11] Situation.

4[11] Processes.

1[12] Falx Cerebri:—Lat. *falx*, a scythe, and *cerebrum*. A fold of the dura mater in the superior longitudinal fissure.

2[12] Tentorium Cerebel-

LI:—Lat. *tendere.* A process of the dura mater separating the cerebrum from the cerebellum.

5[11] Functions.

2[10] ARACHNOID:—Gr., *arachnos*, a spider web, and *eidos.*

1[11] Definition.

2[11] Structure.

3[11] Location.

4[11] SUB-ARACHNOID SPACE:—The interval between the arachnoid and pia mater. Communicates with the fourth ventricle.

5[11] CEREBRO-SPINAL FLUID: A clear fluid occupying sub-arachnoid space.

6[11] Function.

3[10] PIA MATER:—*pia*, tender, and *mater.*

1[11] Definition.

2[11] Structure.

3[11] Location.

4[11] Function.

2[8] Cranial Nerves.

1[9] Definition.

2[9] Kinds.

1[10] Special Sense.

2^{10} Sensory.
3^{10} Motor.
4^{10} Mixed.

3^{9} Parts.

1^{10} OLFACTORY:—Lat. *olere*, to swell, and *facere*.

1^{11} ORIGIN:—It arises from fissure of Sylvius and the posterior part of the anterior lobe of the brain.

2^{11} COURSE:-Passes forward on the under surface of the anterior lobe to the cribriform plate of the ethmoid.

3^{11} DISTRIBUTION:—Distributed to upper part of the nasal mucous membrane.

4^{11} FUNCTION: That of smell.

2^{10} OPTIC:—Gr. *opticos*, eye.

1^{11} ORIGIN:—Rises from the corpora quadrigemini, and optic thalamus.

2^{11} COURSE:—They decussate forming the optic commissure and enter the orbit through the optic foramen.

3^{11} DISTRIBUTION :— They pierce the sclerotic coat and form the retina.

4^{11} FUNCTION:—Vision.

3^{10} MOTOR OCULI:—Lat. *movere*, to move, and *oculus*.

1^{11} ORIGIN:—Rises from the under surface of the middle lobe near the pons.

2^{11} COURSE:–Passes forward under the brain and enters the orbit through the sphenoidal fissure.

3^{11} DISTRIBUTION:—Distributed to the iris and all the muscles of the eye except the superior oblique and external rectus.

4^{11} FUNCTION:—Purely motion.

4^{10} PATHETICUS:—Gr. *pathos*, suffering.

1^{11} ORIGIN:—Rises from the valve Vieussens near the corpora quadrigemini.

2^{11} COURSE:–Passes forward through the sphenoidal fissure at its upper part.

3^{11} DISTRIBUTION:–-Supplies the superior oblique muscle.

4^{11} FUNCTION:—Motor.

5^{10} TRIFACIAL:–Lat. *tres*, three, and *facies*, face.

1[11] ORIGIN:—Rises from the corpus pyramidacle.

2[11] BRANCHES.

1[12] OPHTHALMIC:–Gr. *ophthalmos*, eye.

1[13] ORIGIN: — Separates from main nerve after passing through Casserian ganglion.

2[13] COURSE:—Passes out at the sphenoidal fissure.

3[13] DISTRIBUTION:--Supplies the eye, forhead, and nose.

4[13] FUNCTION: — Sensation.

2[12] SUPERIOR MÁXILLARY.

1[13] ORIGIN:—Same as ophthalmic.

2[13] COURSE:–Passes out at the foramen rotundum.

3[13] DISTRIBUTION:--Supplies nose, upper lip, upper teeth, cheeks, and lower eyelid.

4[13] FUNCTION: — Sensation.

3[12] INFERIOR MAXILLARY.

1[13] ORIGIN:Same as oph-

thalmic, the motor root passing beneath the ganglion.

2^{13} COURSE:–Passes out of foramen ovale.

3^{13} DISTRIBUTION: — To tongue, lower teeth, chin, lower lip, and muscles of mastication.

4^{13} FUNCTION: — Taste, sensation and motion.

6^{10} ABDUCEUS:—Lat. *ab*, and *duco*.

1^{11} ORIGIN:—From the medulla oblongata.

2^{11} COURSE:—Passes out of the sphenoidal fissure between the heads of the external rectus muscle.

3^{11} DISTRIBUTION:—Supplies external rectus.

4^{11} FUNCTION:—Motion.

7^{10} FACIAL, or Portio Dura.

1^{11} ORIGIN:—Rises from the medulla oblongata between the olivary and restiform bodies.

2^{11} COURSE:-Passes forward and outward through the meatus auditorius

internus and the aquiductus Fallopii and escapes at the styloid foramen below the ear.

3^{11} DISTRIBUTION:— To all the muscles of expression of the face.

4^{11} FUNCTION:—Motion.

8^{10} AUDITORY:—Lat. *auditus*, sense of hearing.

1^{11} ORIGIN:—Same as facial.

2^{11} COURSE:– Passes forward and outward through the meatus auditorius internus.

3^{11} DISTRIBUTION:—To the internal ear.

4^{11} FUNCTION:—Hearing.

9^{10} GLASSO-PHARYNGIAL:— Gr. *glossa*, tongue, and *pharyngus*, pharynx.

1^{11} ORIGIN:—From the floor of the fourth ventricle.

2^{11} COURSE:-Passes outward through the jugular foramen.

3^{11} DISTRIBUTION:— Tongue and pharynx.

4^{11} FUNCTION:—Sensation in tongue and motion in the pharynx.

10[10] PNEUMOGASTRIC.

1[11] ORIGIN:–Same as glossopharyngial.

2[11] COURSE: — Passes out through the jugular foramen down the neck to the abdomen and thorax.

3[11] DISTRIBUTION:—To the pharynx, larynx, œsophagus, heart, lungs, stomach and intestines.

4[11] FUNCTION:—Motor, sensory, secretory and nutrient.

11[10] SPINAL ACCESSORY.

1[11] ORIGIN:—The accessory part rises from the medulla below the origin of the pneumogastric. Spinal portion rises from the lateral tract of the cord as low down as the sixth cervical vertebræ.

2[11] COURSE:–Passes upward into the skull through the foramen magnum and escapes through the jugular foramen.

3[11] DISTRIBUTION:– Acessory joins pneumogastric at

the jugular foramen. Spinal portion communicates with the sympathetic nerves and supplies some muscles of the neck.

4^{11} FUNCTION:—Motion.

12^{10} HYPOGLOSSAL:—Lat. *hypo*, under and *glossa*.

1^{11} ORIGIN:—Rises from the medulla between the pyramidal and olivary bodies.

2^{11} COURSE: Escapes through the skull through the anterior condyloid foramen.

3^{11} DISTRIBUTION:- Supplied to the group of muscles connected to the hyoid bone.

4^{11} FUNCTION:—Motor.

3^{8} Spinal cord.

1^{9} Definition.

2^{9} Structure.

3^{9} Diameter.

4^{9} Length.

1^{10} In infancy.

2^{10} At maturity.

5[9] Fissures.
1[10] Anterior Median.
2[10] Posterior Median.
3[10] Anterior Lateral.
4[10] Posterior Lateral.
6[9] Columns.
1[10] Anterior Median.
2[10] Posterior Median.
3[10] Lateral.
7[9] COMMISSURE: — Lat. *commissura*, joining together.
8[9] Membranes.
1[10] Dura Mater.
2[10] Arachnoid.
3[10] Pia Mater.
9[9] Functions.
1[10] Transmit Impressions.
2[10] Reflex Action.
1[11] Definition.
2[11] Examples.
4[8] Spinal Nerves.
1[9] Definition.
2[9] Kinds.
1[10] Sensory.
1[11] Definition.
2[11] ORIGIN:—From posterior horn of gray matter of the cord.
3[11] Ganglion,

1[12] Definition.
2[12] Function.
4[11] DISTRIBUTION:—To the surface of the body and the extremities.
5[11] Function
2[10] Motor.
1[11] Definition.
2[11] ORIGIN:—From the anterior horn of the gray matter of the cord.
3[11] DISTRIBUTION:—To the voluntary muscles of the body and the extremities.
4[11] Function.
3[9] Groups.
1[10] Cervical.
1[11] Number.
2[11] Location.
2[10] Dorsal.
1[11] Number.
2[11] Location.
3[10] Lumbar.
1[11] Number.
2[11] Location.
4[10] Sacral.
1[11] Number

2[11] Location.

5[10] Coccygeal.

1[11] Number.

2[11] Location.

4[9] PLEXUSES:—Lat. *plexus*, a network.

1[10] DEFINITION:—A network of interlacing nerves.

2[10] CERVICAL:—Composed of the anterior branches of the four upper cervical nerves.

1[11] SUPERFICIAL:— Distributed to the superficial muscles of the neck and shoulder.

2[11] DEEP:— Distributed to the deep muscles of the neck and breast, and the larynx.

2[10] BRACHIAL:—Formed of the anterior branches of the four lower cervical and first dorsal.

1[11] Description.

2[11] DISTRIBUTION:—To the muscles of the chest, shoulder, arm, Fore-arm and hand.

3^{10} LUMBAR:–Formed from the four upper lumbar nerves and sometimes the last dorsal.

1^{11} Description.

2^{11} DISTRIBUTION:—To the muscles of the abdomen, pelvis and thigh.

4^{10} SACRAL:—Formed of five sacral nerves.

1^{11} Description.

2^{11} DISTRIBUTION:—To deep muscles of the back, to the viscera of pelvis, and the posterior muscles of thigh.

2^{6} SYMPATHETIC:—Gr. *sym*, and *pathos*.

1^{7} DEFINITION:—A double chain of ganglia connected with each other and with the cerebro-spinal system by nervous cords. These ganglia being situated just in front of the vertebræ and extending from within the skull to the lower part of the sacrum.

2^{7} DIVISIONS.

1^{8} GANGLIA:—Gr. *ganglion*, a knot.

1^{9} DEFINITION:—An enlargement in the course of a nerve, containing nerve cells and thought to be able to create nerve force.

2^{9} Groups.

1[10] CEPHALIC: — Gr. *cephalon*, head.

1[11] Number of Ganglia—3.

2[11] Distribution.

2[10] Cervical.

1[11] Number of Ganglia—3.

2[11] Distribution.

3[10] Thoracic.

1[11] Number of Ganglia—2.

2[11] Distribution.

4[10] Abdominal.

1[11] Number of Ganglia—4.

2[11] Distribution.

5[10] Sacral.

1[11] Number of Ganglia.

2[11] Distribution.

6[10] Coccygeal.

1[11] Number of Ganglia—1, Impæ.

2[11] Distribution.

2[8] Nerves.

1[9] Distribution.

2[9] Communications.

3[9] Function.

12[4] SPECIAL SENSES.

1[5] DEFINITION:—The endowments by which we perceive the physical properties of external objects.

2[5] Hearing.

1[6] Definition.

2[6] Organs.

1[7] Ear.

1[8] External.

1[9] MEATUS AUDITORIUS:—Latin, *meo*, I go, a passage, and *audire*, to hear.

1[10] Shape.

2[10] Length.

3[10] Diameter.

4[10] Glands.

5[10] Hairs.

2[9] PINNA:—Lat. *penna*, feather.

1[10] Structure.

2[10] Parts.

1[11] HELIX:—Gr. *helein*, to roll. The semi-circular eminence which forms the outline of the pinna.

2[11] ANTI-HELIX:—A semi-circular eminence internal to the helix.

3[11] CONCHA:—Gr. *konkos*, a concave shell. A cavity with the meatus at the bottom.

4[11] FOSSA OF THE HELIX:—The groove between the Helix and the Anti-Helix.

5[11] Fossa of the Anti-Helix: — Depression between the divisions of the Anti-Helix at its upper part.

6[11] Tragus:—Gr. *tragos*, a goat. An eminence in front and below the meatus.

7[11] Anti-Tragus:—An eminence posterior and inferior to the tragus.

3[10] Functions.

2[8] Middle-Tympanum.

1[9] Definition.

2[9] Walls.

3[9] Openings.

1[10] Eustachian Tube:—From Eustachius.

1[11] Definition:–A tube leading from the pharynx to the middle ear.

2[11] Shape.

3[11] Length.

4[11] Diameter.

5[11] Function.

2[10] Mastoid Cells:—Cavities in the mastoid portion and communicating with the tympanum.

3[10] Fenestra Ovalis:–Lat. *fenestra*, a window, and *ovum*.

An oval opening between the vestibule and tympanum at the base of the stapes.

4^{10} FENESTRA ROTUNDA:–Lat. *fenestra*, and *rotundus*, round. A circular opening between the tympanum and cochlea.

5^{10} MEATUS AUDITORIUS EXTERNUS:—External opening of the tympanum.

4^{9} Bones.

1^{10} Malleus.

2^{10} Incus.

3^{10} Stapes.

4^{10} Function.

3^{8} Internal.

1^{9} Definition.

2^{9} Parts.

1^{10} Membranous.

2^{10} Bony.

3^{9} Fluids.

1^{10} ENDO LYMPH:—From *endo*, and *lympha*. A fluid which fills the membranous sac or labyrinth of the internal ear.

2^{10} PERI LYMPH:—From *peri*, and *lympha*. A fluid which fills all of the space in the internal ear external to

the membranous sac.

4[9] Divisions.

1[10] VESTIBULE:—Lat. *vestibulum*, a porch.

1[11] DEFINITION:—An irregular cavity next the tympanum and between the cochlea and semi-circular canals.

2[11] Size.

3[11] Parts.

1[12] SACCULUS:—Lat. little bag.

2[12] UTRICLES:—Lat. *uter*, a small bottle.

4[11] Function.

2[10] Semi-circular canals.

1[11] Size.

2[11] Names.

1[12] Superior.

2[12] Posterior.

3[12] External.

3[11] Function.

3[10] COCHLEA:—Gr. *kokhlias*, a spiral shell.

1[11] Shape.

2[11] Size.

3[11] Function.

2[7] Auditory Nerve.

1[8] Origin.

2^{8} Distribution.
1^{9} Cochlea.
2^{9} Vestibule.
3^{9} Semi-circular Canal.
3^{8} Function.
3^{5} Taste.
1^{6} Definition.
2^{6} Organs.
1^{7} Tongue.
1^{8} Definition.
2^{8} Structure.
3^{8} Functions.
2^{7} Nerves.
1^{8} GUSTATORY:—Lat. *gustare*, to taste. A branch from the inferior Maxillary division of the fifth.
2^{8} GLOSSO-PHARYNGEAL:-Nerve of taste in the tongue.
3^{8} HYPO-GLOSSAL:–Nerve of motion in the tongue.
3^{7} Soft Palate.
1^{8} Definition.
2^{8} Structure.
4^{6} Fauces,
1^{8} Definition.
2^{8} Structure.
4^{5} Smell.
1^{6} DEFINITION:—The process by which we recognize the odors of substances.

2^{6} Organs.
1^{7} Nose.
1^{8} Definitions.
2^{8} Tissues.
1^{9} Bones.
2^{9} Cartilages.
3^{9} Muscles.
4^{9} Integuments.
5^{9} FOLLICLES:—Lat *follis*, a bag.
6^{9} Mucous Membrane.
7^{9} Blood Vessels.
8^{9} Names.
2^{7} NASAL FOSSÆ.
1^{8} Definition.
2^{8} Meatusses.
1^{9} SUPERIOR:-Passage under the superior turbinated bone.
2^{9} MIDDLE:—Passage under the middle turbinated bone.
3^{9} INFERIOR:—Passage under the inferior turbinated bone.
3^{7} Nerves.
1^{8} Olfactory.
1^{9} Distribution.
2^{9} Function.
2^{8} Sympathetic.
3^{8} Trifacial.
3^{6} Functions.
5^{5} Touch.

1[6] Definition.
2[6] Organs.
1[7] Skin.
2[7] Papillæ.
3[7] TACTILE CORPUSCLES:—Lat. *tactum*, touch, and *corpus*
4[7] Terminal Bulbs.
3[6] Modifications.
6[5] Vision.
1[6] Definition.
2[6] Organs.
1[7] Optic Nerve.
1[8] Origin.
2[8] Course.
3[8] Distribution.
4[8] Function.
2[7] Globe.
1[8] Shape.
2[8] Diameter.
3[8] Muscles.
1[9] Recti.
2[9] Oblique.
4[8] Coats.
1[9] SCLEROTIC:—*scleros*, hard, the external coat of the eye.
1[10] Location.
2[10] Tissue.
3[10] CORNEA:—Lat. *cornu*. The anterior transparent portion of the sclerotic.

1[11] Characteristics.

2[11] Function.

2[9] CHOROID:—Gr. *khorion*, skin, and *eidos*. A black membrane lining the sclerotic internally.

1[10] Layers.

2[10] Location.

3[10] Function.

4[10] CILIARY PROCESSES:—Triangular folds of the choroid at its anterior part.

5[10] IRIS:—Gr. *iris*, a rainbow.

1[11] DEFINITION:—A circular curtain in the aqueos humor perforated by an opening called the pupil.

2[11] Structure.

1[12] Muscles.

2[12] Pigment.

3[11] Function.

4[11] Pupil.

3[9] RETINA:—Lat. *rete*, a net. The internal coat of the eye, formed of an expansion of the optic nerve.

1[10] Layers.

1[11] RODS AND CONES:—The external layer.

2[11] Granular.

3^{11} Ganglionic.

2^{10} Spots.

1^{11} MACULA LUTEA:—Latin, *macula*, a spot, and *luteus*, yellow. A spot upon the center of the back of the retina where the layers are very thin and where the light easily reaches the cones.

2^{11} BLIND SPOT:—The point where the optic nerve enters.

3^{10} Function.

5^{8} Humors.

1^{9} AQUEOUS:—Lat. *aqua*, water. A fluid behind the cornea and in front of the crystaline lens.

1^{10} Quantity.

2^{10} Reaction.

3^{10} Function.

2^{9} Crystaline Lens.

1^{10} Location.

2^{10} Shape.

2^{10} Suspensory Ligament.

4^{10} Functions.

1^{11} Refract Light.

2^{11} ACCOMMODATION: — The adaption of the eye to view objects at different distances.

3[9] VITREOUS:—Lat. *vitrum*, glass.
1[10] Location.
2[10] Quantity.
3[10] Shape.
4[10] HYALOID MEMBRANE:—Gr. *hyalos*, glassy.
5[10] Function.
3[7] Protecting Organs.
1[8] Orbit.
1[9] Shape.
2[9] Walls.
3[9] Cushion of Fat.
2[8] Eye Brows.
1[9] Tissues.
2[9] Function.
3[8] Eye Lids.
1[9] Tissues.
2[9] Eye Lashes.
3[9] Functions.
4[8] Lachrymal Apparatus.
1[9] Glands.
1[10] Location.
2[10] Ducts.
3[10] Functions.
2[9] Canals.
3[9] Sac.
4[9] Duct.
3[6] Irregularities.

1[7] Far Sightedness.
1[8] Causes.
2[8] How Corrected.
2[7] Short Sightedness.
1[8] Causes.
2[8] How Corrected.
3[7] Double Vision.
1[8] Causes.
1[9] STRABISMUS:-Gr. *strabos*, twisted, the condition of the eyes when the two axes cannot be directed to the same point.
1[10] Internal.
2[10] External.
2[9] Paralysis.
2[8] How Corrected.

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